



## Complete Summary

---

### TITLE

Diabetes mellitus: percent of eligible patients with diabetes mellitus having a retinal exam by an eye care specialist, timely, as indicated by disease control (NEXUS clinics cohort).

### SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure assesses the percent of eligible patients with diabetes mellitus who have had a retinal exam by an eye care specialist within specified time periods as indicated by disease control.

### RATIONALE

Detection and treatment of diabetic eye disease with laser therapy can reduce the development of severe vision loss by an estimated 50% to 60%.

### PRIMARY CLINICAL COMPONENT

Diabetes mellitus; retinopathy; retinal exam

## DENOMINATOR DESCRIPTION

Eligible patients with diabetes mellitus from the NEXUS Clinics cohort (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

## NUMERATOR DESCRIPTION

The number of patients from the denominator who have had a retinal exam by an eye care specialist within specified time periods (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

### Evidence Supporting the Measure

#### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

#### NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [VA/DoD clinical practice guideline for the management of diabetes mellitus.](#)

### Evidence Supporting Need for the Measure

#### NEED FOR THE MEASURE

Use of this measure to improve performance  
Variation in quality for the performance measured

#### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

### State of Use of the Measure

#### STATE OF USE

Current routine use

#### CURRENT USE

External oversight/Veterans Health Administration  
Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Ambulatory Care

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Unspecified

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

Percent of the population with diabetes:

- Nearly 20.1% of the United States population, or 7.0 million people age 65 and older
- Approximately 2.8 million or 13% of all African Americans
- Two million or 10.2% of all Latino Americans
- Approximately 7.8 million or 8.3% of all men over the age 20 in the United States
- Approximately 9.1 million or 8.9% of all women over the age of 20 in the United States

### EVIDENCE FOR INCIDENCE/PREVALENCE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

### ASSOCIATION WITH VULNERABLE POPULATIONS

See "Incidence/Prevalence" field.

## BURDEN OF ILLNESS

Complications of diabetes include:

### Heart disease

- Heart disease is the leading cause of diabetes-related deaths. Adults with diabetes have heart disease death rates about 2 to 4 times higher than adults without diabetes.

### Stroke

- The risk of stroke is 2 to 4 times higher among people with diabetes.

### High blood pressure

- About 73% of adults with diabetes have blood pressure greater than or equal to 130/80 millimeters of mercury (mm Hg) or use prescription medications for hypertension.

### Blindness

- Diabetes is the leading cause of new cases of blindness among adults 20-74 years old.
- Diabetic retinopathy causes from 12,000 to 24,000 new cases of blindness each year.

### Kidney disease

- Diabetes is the leading cause of treated end-stage renal disease, accounting for 43% of new cases.
- In 1999, 38,160 people with diabetes began treatment for end-stage renal disease.
- In 1999, a total of 114,478 people with diabetes underwent dialysis or kidney transplantation.

### Nervous system disease

- About 60% to 70% of people with diabetes have mild to severe forms of nervous system damage. The results of such damage include impaired sensation or pain in the feet or hands, slowed digestion of food in the stomach, carpal tunnel syndrome, and other nerve problems.
- Severe forms of diabetic nerve disease are a major contributing cause of lower-extremity amputations.

### Amputations

- More than 60% of nontraumatic lower-limb amputations in the United States occur among people with diabetes.
- From 1997 to 1999, about 82,000 nontraumatic lower-limb amputations were performed each year among people with diabetes.

## EVIDENCE FOR BURDEN OF ILLNESS

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## UTILIZATION

Unspecified

## COSTS

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

## IOM CARE NEED

Living with Illness

## IOM DOMAIN

Effectiveness

## Data Collection for the Measure

## CASE FINDING

Users of care only

## DESCRIPTION OF CASE FINDING

Eligible patients with diabetes mellitus from the NEXUS Clinics cohort\*

\*Refer to the original measure documentation for patient cohort description.

## DENOMINATOR SAMPLING FRAME

Patients associated with provider

## DENOMINATOR INCLUSIONS/EXCLUSIONS

## Inclusions

Eligible patients with diabetes mellitus from the NEXUS Clinics cohort\*

\*Eligible Diabetes Mellitus Patients: Meets NEXUS Clinics cohort selection criteria AND has a diagnosis of diabetes upon Computerized Patient Record System (CPRS) chart review. Refer to the original measure documentation for patient cohort description and sampling size strategy.

## Exclusions

Unspecified

## DENOMINATOR (INDEX) EVENT

Clinical Condition

Encounter

## DENOMINATOR TIME WINDOW

Time window precedes index event

## NUMERATOR INCLUSIONS/EXCLUSIONS

### Inclusions

The number of patients from the denominator who have had a retinal exam by an eye care specialist within specified time periods\*

\*Note:

- Eye exam: dilated pupil fundoscopic exam by an eye care specialist, or dilated photo, or retinal digital image (dilated or undilated) read by an eye care specialist AND RESULTS AVAILABLE IN THE CHART
- Eye care specialist: Ophthalmologist or Optometrist
- Timely according to control - Eye exam interval at any one of the following:
  - Annually:
    - If on insulin, OR
    - If HgbA1c past 12 months greater than or equal to 8, OR
    - If No HgbA1c past 12 months, THEN
  - Can be in 24 months IF all 3 of the following 3 items are documented:
    - Not on insulin,
    - Most recent HgbA1c in past 12 months less than 8,
    - Normal eye exam during past 24 months

### Exclusions

Unspecified

## NUMERATOR TIME WINDOW

Fixed time period

## DATA SOURCE

Administrative and medical records data

## LEVEL OF DETERMINATION OF QUALITY

Individual Case

## PRE-EXISTING INSTRUMENT USED

Unspecified

## Computation of the Measure

## SCORING

Rate

## INTERPRETATION OF SCORE

Better quality is associated with a higher score

## ALLOWANCE FOR PATIENT FACTORS

Unspecified

## STANDARD OF COMPARISON

Internal time comparison  
Prescriptive standard

## PRESCRIPTIVE STANDARD

Fiscal year (FY) 2005 targets for retinal exam (NEXUS Clinics):

- Facility Floor: 69%
- Meets Target: 82%
- Exceeds Target: 87%

## EVIDENCE FOR PRESCRIPTIVE STANDARD

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## Evaluation of Measure Properties

## EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

### ORIGINAL TITLE

Diabetes mellitus: retinal exam.

### MEASURE COLLECTION

[Fiscal Year \(FY\) 2005: Veterans Health Administration \(VHA\) Performance Measurement System](#)

### MEASURE SET NAME

[Diabetes Mellitus](#)

### DEVELOPER

Veterans Health Administration

### ADAPTATION

Measure was not adapted from another source.

### RELEASE DATE

2001 Nov

### REVISION DATE

2005 Mar

### MEASURE STATUS

Please note: This measure has been updated. The National Quality Measures Clearinghouse is working to update this summary.

### SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

### MEASURE AVAILABILITY

The individual measure, "Diabetes Mellitus: Retinal Exam," is published in "FY 2005 VHA Performance Measurement System: Technical Manual."

For more information contact:



Department of Veterans Affairs  
Office of Quality and Performance (10Q)  
ATTN: Roxane Rusch, E-mail: [roxane.rusch@va.gov](mailto:roxane.rusch@va.gov) or  
Bonny Collins, E-mail: [bonny.collins@va.gov](mailto:bonny.collins@va.gov) or  
Lynnette Nilan, E-mail: [lynnette.nilan@va.gov](mailto:lynnette.nilan@va.gov)

#### NQMC STATUS

This NQMC summary was completed by ECRI on September 27, 2002. The information was verified by the Veterans Health Administration on October 29, 2002. This NQMC summary was updated by ECRI on November 9, 2004. The information was verified by the measure developer on December 10, 2004.

#### COPYRIGHT STATEMENT

No copyright restrictions apply.

© 2006 National Quality Measures Clearinghouse

Date Modified: 8/21/2006

